

B/2012  
\$2812

Docket No.: 005916 USA/FPS/MMCS/MC

PATENT/OFFICIAL

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of :  
: Young Joseph PAIK :  
: Serial No. 09/998,384 : Group Art Unit: 2812  
: Filed: November 30, 2001 : Examiner:

For: FEEDFORWARD AND FEEDBACK CONTROL FOR CONDITIONING OF  
CHEMICAL MECHANICAL POLISHING PAD

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This submission does not constitute a representation that a search has been made or that no better art exists and does not constitute an admission or representation that any of the listed documents is material or constitutes prior art. If it should be determined that any of the listed documents does not constitute prior art under the United States law, Applicants reserve the right

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to present to the Office the relevant facts and law regarding the appropriate status of such document.

Applicant petitions for consideration of the enclosed documents by the Examiner. No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of the information disclosure statement.

The petition fee of \$180.00 pursuant to 37 CFR § 1.17(p) is attached. The Commissioner is authorized to charge any deficiency in any fees pursuant to 37 CFR § 1.17 associated with this communication and to credit any excess payment to Deposit Account No. 08-0219.

Respectfully submitted,

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005916 USA/  
FPS/MMCS/MC

SERIAL NO.  
09/998,384

APPLICANT  
Young Joseph PAIK

**FILING DATE**  
November 30, 2001

GROUP  
2812

## U.S. PATENT DOCUMENTS

[illegible]

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			

	Boning, Duane et al. "Run by Run Control of Chemical-Mechanical Polishing." <i>IEEE Trans.</i> October 1996. Vol. 19, No. 4. pp. 307-314.
	Moyne, James et al. "A Run-to-Run Control Framework for VLSI Manufacturing." <i>Microelectronic Processing '93 Conference Proceedings.</i> September 1993.
	Telfeyan, Roland et al. "Demonstration of a Process-Independent Run-to-Run Controller." <i>187<sup>th</sup> Meeting of the Electrochemical Society.</i> May 1995.
	Moyne, James et al. "A Process-Independent Run-to-Run Controller and Its Application to Chemical-Mechanical Planarization." <i>SEMI/IEEE Adv. Semiconductor Manufacturing Conference.</i> August 15, 1995.
	Moyne, James et al. "Adaptive Extensions to be a Multi-Branch Run-to-Run Controller for Plasma Etching." <i>Journal of Vacuum Science and Technology.</i> 1995.
	Sachs, Emanuel et al. "Process Control System for VLSI Fabrication."
	Chaudhry, Nauman et al. "Active Controller: Utilizing Active Databases for Implementing Multi-Step Control of Semiconductor Manufacturing." <i>University of Michigan.</i> pp. 1 – 24.
	Chaudhry, Nauman et al. "Designing Databases with Fuzzy Data and Rules for Application to Discrete Control." <i>University of Michigan.</i> pp. 1 – 21.
	Chaudhry, Nauman A. et al. "A Design Methodology for Databases with Uncertain Data." <i>University of Michigan.</i> pp. 1 – 14.
	Khan, Kareemullah et al. "Run-to-Run Control of ITO Deposition Process." <i>University of Michigan.</i> pp. 1 – 6.
	Moyne, James et al. "Yield Improvement @ Contact Through Run-to-Run Control."
	Kim, Jiyoung et al. "Gradient and Radial Uniformity Control of a CMP Process Utilizing a Pre- and Post-Measurement Strategy." <i>University of Michigan.</i>
EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.